

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

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62941/WO/RTE

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## PCT

### NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Rule 71.1)

Date of mailing (day/month/year) 22.03.2005	
Applicant's or agent's file reference 62941	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/EP 03/50945	International filing date (day/month/year) 04.12.2003
Priority date (day/month/year) 10.12.2002	
Applicant THALES ET AL.	

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

**4. REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The Applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purpose of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purpose of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

<p><b>Name and mailing address of the IPEA</b></p> <div style="display: flex; align-items: center;"> <div> <p>European Patent Office D-80298 Munich Tel. +49 89 2399-0, Tx: 523656 epmu d Fax: +49-89 2399-4465</p> </div> </div>	<p><b>Authorized officer</b></p> <div style="display: flex; align-items: center; justify-content: space-between;"> <div> <p>Weman, E</p> <p>Tel. +49 89 2399-7961</p> </div> </div>
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**Relating to point V**

**Reasoned statement regarding the novelty, inventive step and the industrial applicability; citations and explanations in support of this statement**

1. Reference is made to the following documents:

D1: XP006017871 STERNBERG B K ET AL: "Removal of time-varying errors in network analyzer measurements and technology", IEE, STEVENAGE, HERTS, GB, vol. 149, no. 1, 4th Jan 2002 (2002-01-04), pages 22-30  
D2: US-A-6 147 501  
D3: US-B-6 421 624  
D4: US-A-5 412 414

2. It does not seem that the known techniques of the available prior art justify objections being raised in regard to PCT articles 33(2) and 33(3) against the new independent claim.
3. The invention relates to a phase calibration method for a microwave transmission system comprising a plurality of microwave sources.

The problem posed by claim 1 is considered as the elimination of a leakage signal or parasitic signal created by microwave sources that will not deactivate during the calibration sequence (see description on page 2 lines 11-15, page 11 lines 18-29).

Indeed, it is known in the field of microwave network analyzers to carry out a calibration, referred to as internal calibration, in order to measure the internal leakage signal (see D3 col. 9 lines 45-58).

On the other hand, none of the documents available in the research report mentions the problem of sources unwilling to deactivate in a microwave transmission system comprising a plurality of sources.

The method as claimed in claim 1 allows a valid calibration to be obtained for all the sources that can be controlled, even if one or more other sources are stuck in transmission or reception mode. In conventional calibration methods, the calibration can longer be performed. Indeed, since the deactivation of the source is impossible, the sum of the signals from the source to be calibrated and the defective source is obtained for each source to be calibrated. The result is that a single defective source will corrupt the whole of the calibrations of all the other sources, for example rendering an array antenna unusable.

The method as claimed in claim 1 solves the problem of the sources that are unable to be deactivated.

4. None of the documents cited either divulges or suggests the features of claim 1 that therefore meets the criteria of novelty and inventive step (PCT Art. 33(2) and 33(3)).
5. Contrary to the demands of PCT regulation 5.1 a)ii), the description does not indicate the pertinent prior art described in the documents D3 and D4, nor does it cite these documents.

**I. Basis of the report**

1. This report has been drawn up on the basis of the following elements *(the replacement sheets received by the receiving office in response to an invitation according to Article 14 are considered in the present report as "originally filed" and are not annexed to the report as they contain no amendments (Rules 70.16 and 70.17).):*

**Description, pages:**

1, 2, 4-6, 8-10, 12-16                      as originally filed  
3, 7, 11                                      received on 17.02.2004 with the letter of 10.02.2004

**Claims, No.:**

1-4    received on 02.03.2005 with the letter of 02.03.2005

**Drawings, sheets:**

1/6-6/6                                      as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language , which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/50945

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig

5. ☐ This report has been written disregarding (some of) the amendments, which were considered as going beyond the description of the invention, as filed, as is indicated below (Rule 70.2(c)):

*(All replacement sheets comprising amendments of this nature should be indicated in point 1 and attached to this report).*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty	Yes:	Claims	1-4
	No:	Claims	
Inventive Step	Yes:	Claims	1-4
	No:	Claims	
Industrial Applicability	Yes:	Claims	1-4
	No:	Claims	

2. Citations and explanations

**see separate sheet**